

Title (en)

PIXEL MAPPING SOLID-STATE LIDAR TRANSMITTER SYSTEM AND METHOD

Title (de)

PIXELABBILDUNGS-FESTKÖRPER-LIDAR-SENDERSYSTEM UND -VERFAHREN

Title (fr)

SYSTÈME ET PROCÉDÉ D'ÉMETTEUR LIDAR À L'ÉTAT SOLIDE À MAPPAGE DE PIXELS

Publication

EP 4337989 A2 20240320 (EN)

Application

EP 22838193 A 20220509

Priority

- US 202163187375 P 20210511
- US 2022028297 W 20220509

Abstract (en)

[origin: US2022365219A1] A LiDAR system includes a transmitter having a first and second laser emitter generating first and second optical beams and projecting the optical beams along a transmitter optical axis. A receiver includes an array of pixels positioned with respect to the receive optical axis such that light from the first optical beam reflected from an object forms a first image area and light from the second optical beam reflected by the object forms a second image area on the array of pixels such that an overlap region between the first image area and the second image area is formed based on a measurement range and on a relative position of the transmitter optical axis and the receive optical axis. A processor determines what pixels are in the overlap region from electrical signals generated by at least one pixel in the overlap region and generates a return pulse in response.

IPC 8 full level

G01S 17/89 (2020.01); **G01S 7/484** (2006.01); **G01S 7/4863** (2020.01); **G01S 17/931** (2020.01); **H01S 5/183** (2006.01)

CPC (source: EP KR US)

G01S 7/4815 (2013.01 - EP KR US); **G01S 7/4816** (2013.01 - EP KR US); **G01S 7/4863** (2013.01 - KR US); **G01S 7/4865** (2013.01 - KR US); **G01S 17/894** (2020.01 - EP KR US); **G01S 17/931** (2020.01 - EP KR)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

US 2022365219 A1 20221117; CN 117337404 A 20240102; EP 4337989 A2 20240320; JP 2024518461 A 20240501; KR 20240005752 A 20240112; WO 2023282970 A2 20230112; WO 2023282970 A3 20230413; WO 2023282970 A8 20230209

DOCDB simple family (application)

US 202217739859 A 20220509; CN 202280034260 A 20220509; EP 22838193 A 20220509; JP 2023568683 A 20220509; KR 20237038937 A 20220509; US 2022028297 W 20220509